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ABSTRACT

Data are presented concerning the numbers of students taking the Preliminary Scholastic Aptitude Test (PSAT) and the Preliminary Scholastic Aptitude Test/National Merit Scholarship Qualifying Test (PSAT/NMSQT), and their mean scores for the period 1959 through 1976. The implications of these results in relation to changes in the candidate group are discussed. A major change in the candidate group occurred when the PSAT merged with the National Merit Test. Sharp increases in scores in the years immediately following the merge can be attributed to the increased number of superior students attracted to the test because it is used as the basis for awarding scholarships. At least for the verbal portions, a discounting of the 1971-72 and 1972-73 increases in mean PSAT/NMSQT scores would result in nearly parallel trend lines for the Scholastic Aptitude Test and the PSAT. (Author/EVH)

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A table showing numbers of cases, means, and standard deviations for PSAT (or PSAT/NMSQT) junior candidates for the years 1959-60 through 1976-77 is attached. Also attached are graphs of trends in PSAT mean scores and SAT testing year mean scores. (Since we have results from the October 1976 administration of the PSAT/NMSQT -- given once a year -- we can show the 1976-77 means for that test. The 1976-77 SAT testing year, however, is not complete.)

Over the years, the PSAT has been taken primarily by juniors although some seniors and sophomores also take the test. Currently about 95 percent of all candidates are juniors. Because the mix of seniors and sophomores in the total candidate group and their characteristics have changed for a variety of reasons (including use of the PSAT for different scholarship selection purposes), the data presented here are based on junior candidates only -- the group of PSAT candidates presumed to have been most stable in its composition over time.

Data for the first few years of the PSAT program (when the program was new and numbers of students taking the test were increasing rapidly) should probably be disregarded. Since 1963-64 (a high point for PSAT verbal mean scores and one year after the SAT high point), PSAT verbal means have declined in most years. From a high of 43.3 (equivalent to 433 on the SAT scale), PSAT verbal means have declined to a low of 40.5 in 1976-77.

Thus, although the PSAT pattern is not as regular as that for the SAT, the PSAT verbal means also exhibit some decline. It should also be noted that the PSAT and the National Merit Scholarship Qualifying Test were merged in 1971-72 (to become the PSAT/NMSQT). Thus, the increases in mean scores in 1971-72 and 1972-73 may be caused, at least in part, by a change in the testing program that resulted in an increase in high scoring candidates. Without this change the trends in mean scores for SAT-V and PSAT-V might have been even more nearly parallel.

The trend for PSAT mathematical mean scores does not appear to parallel the gradual decline exhibited by the SAT mathematical means. However, the possibility that the merger of the PSAT and the NMSQT has had an effect on mean scores for more recent years is also evident in the graph of PSAT mathematical means.

Some evidence concerning the possible effects of the merger may be found in the data on numbers of participating schools and students for the years just preceding and just following the merger.

	Year	Number of schools	All candidates	Average number of candidates per school
PSAT.	1968-69	15,522	1,284,285	82.7
	1969-70	14,883	1,162,654	78.1
	1970-71	14,398	1,133,839	78.8
PSAT/NMSQT.	1971-72	16,936	1,161,296	68.6
	1972-73	17,354	1,117,556	64.4
	1973-74	17,485	1,134,635	64.9

(Note that there are figures for all candidates, not just junior candidates.)

Summary Statistics of PSAT Scores for Juniors

Junior year	Male			Female			Total		
	N	M	SD	N	M	SD	N	M	SD
PSAT-Verbal									
1959-60 . . .	186,791	41.0	11.2	191,365	41.3	10.8	378,156	41.2	11.0
1960-61 . . .	229,781	40.9	10.7	232,008	41.0	10.4	461,789	40.9	10.6
1961-62 . . .	253,001	42.1	10.7	254,839	42.6	10.6	507,839	42.3	10.7
1962-63 . . .	317,085	42.8	10.7	330,624	42.9	10.5	647,709	42.9	10.5
1963-64 . . .	379,282	43.1	10.8	395,793	43.4	10.6	775,075	43.3	10.7
1964-65 . . .	402,465	42.7	10.6	421,496	43.0	10.4	823,961	42.9	10.5
1965-66 . . .	447,808	42.5	11.0	477,685	42.0	10.9	926,035	42.2	10.9
1966-67 . . .	461,994	42.7	11.0	496,478	42.7	10.7	958,974	42.7	10.8
1967-68 . . .	493,831	42.0	10.8	538,421	42.1	10.7	1,032,945	42.0	10.8
1968-69 . . .	508,888	42.2	11.5	555,304	42.9	11.6	1,064,986	42.6	11.6
1969-70 . . .	507,570	42.2	10.8	559,721	42.2	10.8	1,067,834	42.2	10.8
1970-71 . . .	492,990	41.4	11.0	553,583	41.4	10.7	1,047,135	41.4	10.8
*1971-72 . . .	512,622	42.1	10.6	576,393	42.4	10.5	1,090,868	42.2	10.6
*1972-73 . . .	491,385	42.6	11.1	564,975	42.7	10.9	1,056,752	42.7	11.0
*1973-74 . . .	492,683	42.0	10.8	574,424	41.7	10.7	1,067,601	41.8	10.8
*1974-75 . . .	503,959	42.2	10.7	589,840	41.1	10.4	1,094,328	41.6	10.5
*1975-76 . . .	508,834	41.8	11.1	602,818	40.4	11.1	1,112,483	41.0	11.1
*1976-77 . . .	510,543	40.9	10.4	609,174	40.1	10.3	1,120,542	40.5	10.4

Summary Statistics of PSAT Scores for Juniors (Continued)

Junior Year	Male			Female			Total		
	N	M	SD	N	M	SD	N	M	SD
PSAT-Mathematical									
1959-60 . . .	186,791	47.6	10.2	191,365	42.4	8.6	378,156	45.0	9.8
1960-61 . . .	229,755	47.5	10.2	231,956	42.3	9.2	461,711	44.8	10.1
1961-62 . . .	252,995	48.6	10.4	254,820	43.6	9.4	507,804	46.1	10.2
1962-63 . . .	317,069	48.7	10.6	330,599	44.3	9.7	647,668	46.5	10.4
1963-64 . . .	379,282	47.6	10.5	395,793	43.5	9.3	775,075	45.6	10.1
1964-65 . . .	402,465	46.9	10.9	421,496	42.6	9.8	823,961	44.7	10.6
1965-66 . . .	447,803	48.3	11.1	477,678	43.8	10.2	926,023	45.9	10.9
1966-67 . . .	461,986	47.1	11.5	496,455	43.1	10.7	958,943	45.0	11.3
1967-68 . . .	493,829	46.4	10.8	538,418	42.7	9.7	1,032,940	44.5	10.4
1968-69 . . .	508,858	47.4	11.5	555,260	44.0	10.5	1,064,912	45.6	11.1
1969-70 . . .	507,557	47.0	11.4	559,714	43.2	10.6	1,067,814	45.0	11.1
1970-71 . . .	492,982	48.4	11.5	553,568	44.1	10.6	1,047,112	46.1	11.2
*1971-72 . . .	512,622	47.3	11.6	576,393	43.4	10.5	1,090,868	45.2	11.2
*1972-73 . . .	491,294	49.1	11.4	564,864	45.0	10.4	1,056,550	46.9	11.1
*1973-74 . . .	492,573	47.8	11.8	574,256	43.5	10.9	1,067,323	45.5	11.5
*1974-75 . . .	503,790	48.2	11.2	589,620	43.9	9.9	1,093,938	45.9	10.7
*1975-76 . . .	508,700	47.9	11.4	602,631	43.5	10.4	1,112,159	45.5	11.1
*1976-77 . . .	510,435	47.3	11.5	609,036	43.0	10.4	1,120,298	45.0	11.1

*PSAT/NMSQT

The increase in school participation is striking. After slight declines from 1968-69 to 1969-70 and 1969-70 to 1970-71, the number of schools increased in 1971-72 by 2,538 and in 1972-73 by another 418 -- a total of 2,956. At the same time both total candidate volume and number of junior candidates (see attached table) increased only slightly between 1970-71 and 1971-72 and actually declined from 1971-72 to 1972-73.

We know that volumes in schools that traditionally participated in the PSAT program were declining slightly (see the 1968-69 to 1970-71 figures), and the failure of volumes to increase significantly in 1971-72 and 1972-73 can probably be attributed partly to a continuation of this trend. However, the fact that the increase of nearly 3,000 schools (more than a 20 percent increase) from 1970-71 to 1972-73 was not accompanied by a larger number of students tested almost surely means that many of these new schools tested only a few students each. Undoubtedly, these students tended to be the ones judged by the schools to be best able to compete in the National Merit program. Given the signs of declines in numbers of students tested in traditional PSAT schools (possibly relatively low scoring students) and the replacement or partial replacement of these students by high scoring students in schools attracted to the test by the National Merit connection, there are substantial reasons for believing that sharp increases in scores in the years immediately after the merger were due to changes in the composition of the candidate group. At least for the verbal test, a discounting of the 1971-72 and 1972-73 increases in mean PSAT/NMSQT scores would result in very nearly parallel trend lines for the SAT-V and PSAT-V.

Figure 1

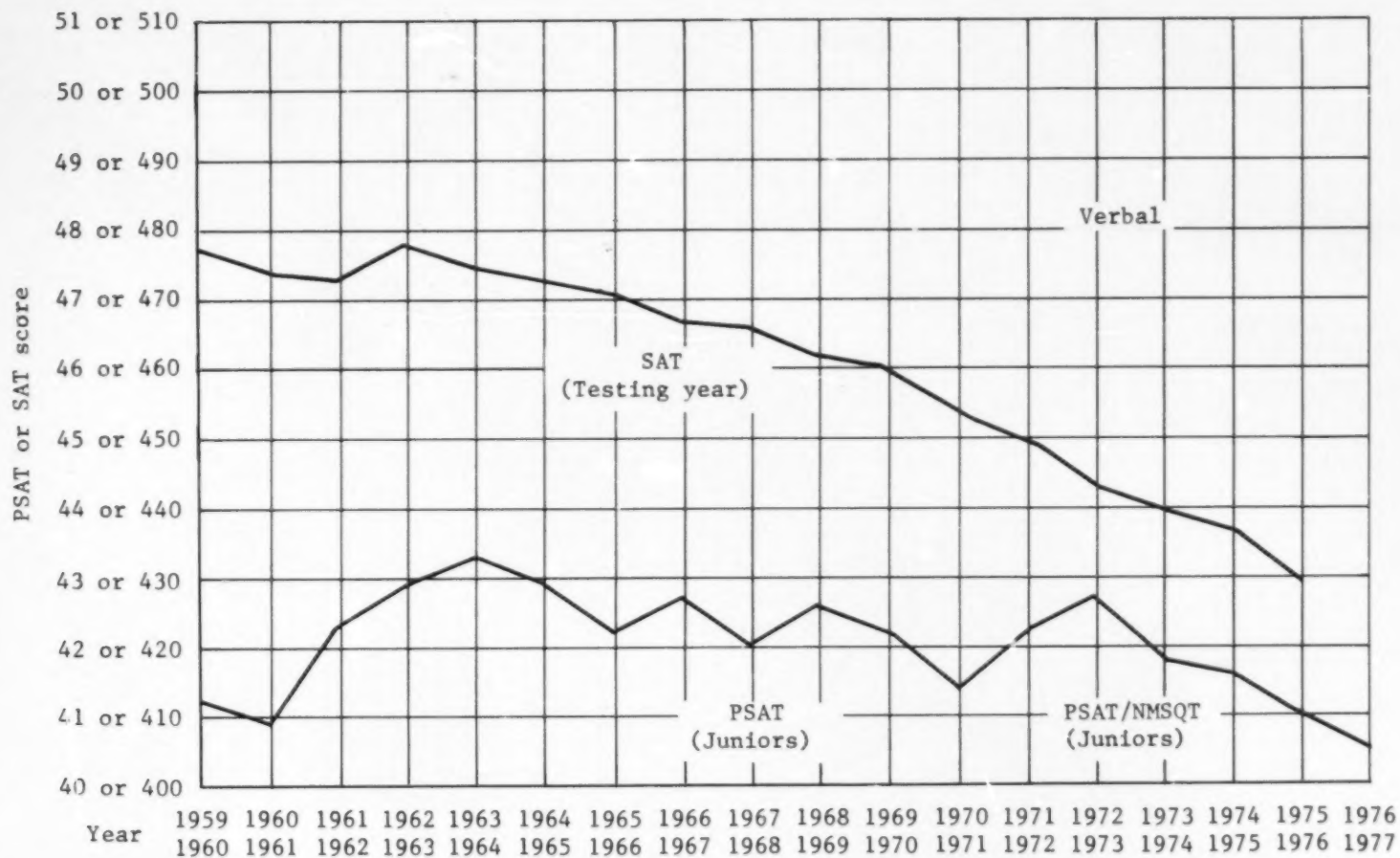


Figure 2

